

Page 103, line 1, delete "II-3" after "Figure" and insert --10 shows--, then move entire page, as amended, to page 15, line 10, before "Fig."

**IN THE FIGURES:**

Please replace original figures with amended figures 1-10, which are attached to the Substitute Specification being filed herewith..

**IN THE CLAIMS:**

Please delete claims 122, 127 and 130 without prejudice or disclaimer.

Please amend the claims, as follows:

38. (Amended) A method of stimulating epithelial cells [*in vivo*] comprising administering to a patient in need thereof an epithelial cell stimulating amount of a glycosylated or unglycosylated keratinocyte growth factor (KGF) polypeptide, wherein said polypeptide comprises amino acids 32-78 of Figure 7 and has a molecular weight of between about 16 and about 30 kDa, as calculated by SDS-PAGE under reducing conditions, and [stimulates a greater difference in fold stimulation of BALB/MK keratinocyte cells relative to NIH/3T3 fibroblasts when compared to the difference in fold stimulation of BALB/MK cells relative to NIH/3T3 cells stimulated by epidermal growth factor (EGF), transforming growth factor-alpha (TGF-alpha), acidic fibroblast growth factor (aFGF) and basic fibroblast growth factor (bFGF), as measured by percent of maximal H<sup>3</sup>-thymidine incorporation] has mitogenic activity on BALB/MK keratinocyte cells.

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49. (Amended) A method of accelerating or improving the healing of a wound involving tissue of epithelial origin, said method comprising administering to the wound site of a patient, an epithelial cell stimulating amount of a glycosylated or unglycosylated keratinocyte growth factor (KGF) polypeptide, wherein said polypeptide comprises amino acids 32-78 of Figure 7 and has a molecular weight of between about 16 and about 30 kDa, as calculated by SDS PAGE under reducing conditions, and [stimulates a greater difference in fold stimulation of BALB/MK keratinocyte cells relative to NIH/3T3 fibroblasts when compared to the difference in fold stimulation of BALB/MK cells relative to NIH/3T3 cells stimulated by epidermal growth factor (EGF), transforming growth factor-alpha (TGF-alpha), acidic fibroblast growth factor (aFGF) and basic fibroblast growth factor (bFGF), as measured by percent of maximal H<sup>3</sup>-thymidine incorporation] has mitogenic activity on BALB/MK keratinocyte cells.

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57. (Amended) A method of stimulating epithelial cells [*in vivo*] comprising administering to a patient in need thereof an epithelial cell stimulating amount of a glycosylated or unglycosylated keratinocyte growth factor (KGF) polypeptide comprising the amino acid sequence of Figure 7, or a segment [thereof] of said sequence, [wherein said polypeptide stimulates a greater difference in fold stimulation of BALB/MK keratinocyte cells relative to NIH/3T3 fibroblasts when compared to the difference in fold stimulation of BALB/MK cells relative to NIH/3T3 cells

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stimulated by epidermal growth factor (EGF), transforming growth factor-alpha (TGF-alpha), acidic fibroblast growth factor (aFGF) and basic fibroblast growth factor (bFGF), as measured by percent of maximal H<sup>3</sup>-thymidine incorporation] wherein said segment comprises a sufficient number of amino acids 32-78 of Figure 7 to confer on said polypeptide mitogenic activity on BALB/MK keratinocyte cells.

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63. (Amended) The method of claim 57, wherein the polypeptide is a segment of the amino acid sequence of Figure 7 comprising amino acids 32-64 of Figure 7.

64. (Amended) The method of claim [63] 57, wherein the polypeptide comprises (a) a sufficient number of amino acids 32-64 of Figure 7 that said polypeptide has epithelial cell specificity [said greater stimulatory activity on BALB/MK cells relative to NIH/3T3 cells], and (b) amino acids 65-194 of Figure 7.

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69. (Amended) The method of claim [63] 57, wherein the polypeptide consists of (a) a sufficient number of amino acids 32-64 that said polypeptide has [said greater stimulatory activity on BALB/MK cells relative to NIH/3T3 cells] epithelial cell specificity, and (b) amino acids 65-194 of Figure 7.

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82. (Amended) A method of accelerating or improving the healing of a wound involving tissue of epithelial origin, the method comprising

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administering to the wound site of a patient an epithelial cell stimulating amount of a glycosylated or unglycosylated keratinocyte growth factor (KGF) polypeptide comprising the amino acid sequence of Figure 7 or a segment [thereof,] of said sequence, [wherein said polypeptide stimulates a greater difference in fold stimulation of BALB/MK keratinocyte cells relative to NIH/3T3 fibroblasts when compared to the difference in fold stimulation of BALB/MK cells relative to NIH/3T3 cells stimulated by epidermal growth factor (EGF), transforming growth factor-alpha (TGF-alpha), acidic fibroblast growth factor (aFGF) and basic fibroblast growth factor (bFGF), as measured by percent of maximal H<sup>3</sup>-thymidine incorporation] wherein said segment comprises a sufficient number of amino acids 32-78 of Figure 7 to confer on said polypeptide mitogenic activity on BALB/MK keratinocyte cells.

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87. (Amended) The method of claim 82, wherein the polypeptide is a segment of the amino acid sequence of Figure 7 comprising amino acids 32-64 of Figure 7.

88. (Amended) The method of claim [87] 82, wherein the polypeptide comprises (a) a sufficient number of amino acids 32-64 of Figure 7 that said polypeptide has [said greater stimulatory activity on BALB/MK cells relative to NIH/3T3 cells] epithelial cell specificity, and (b) amino acids 65-189 of Figure 7.

F27 90. (Amended) The method of claim 87, wherein the polypeptide comprises (a) a sufficient number of amino acids 32-64 that said polypeptide has [said greater stimulatory activity on BALB/MK cells relative to NIH/3T3 cells] epithelial cell specificity, and (b) amino acids 65-194 of Figure 7.

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F28 95. (Amended) The method of claim 87, wherein the polypeptide consists of (a) a sufficient number of amino acids 32-64 of Figure 7 that said polypeptide has [said greater stimulatory activity on BALB/MK cells relative to NIH/3T3 cells] epithelial cell specificity, and (b) amino acids 65-194 of Figure 7.

F29 110. (Amended) A method of inhibiting keratinocyte growth factor (KGF) activity [*in vivo*], the method comprising administering to a patient a KGF activity-inhibiting amount of a pharmaceutical composition, wherein said pharmaceutical composition comprises (a) an antibody that binds KGF and (b) a pharmaceutically acceptable carrier.

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N6 114. (Amended) A method of stimulating epithelial cells *in vitro* comprising contacting epithelial cells with an epithelial cell stimulating amount of a glycosylated or unglycosylated keratinocyte growth factor (KGF) polypeptide, wherein said polypeptide comprises amino acids 32-78 of Figure 7 and has a molecular weight of between about 16 and about 30 kDa, as calculated by SDS PAGE under reducing conditions, and [stimulates a greater difference in fold stimulation of BALB/MK keratinocyte cells relative to NIH/3T3 fibroblasts when compared to the

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difference in fold stimulation of BALB/MK cells relative to NIH/3T3 cells stimulated by epidermal growth factor (EGF), transforming growth factor-alpha (TGF-alpha), acidic fibroblast growth factor (aFGF) and basic fibroblast growth factor (bFGF), as measured by percent of maximal H<sup>3</sup>-thymidine incorporation] has mitogenic activity on BALB/MK keratinocyte cells.

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121. (Amended) A method of treating a patient having an epithelial skin condition caused by over-expression of Keratinocyte Growth Factor (KGF), comprising topically applying to the skin of said patient, a therapeutically effective amount of a compound, wherein in an *in vitro* bioassay, said compound inhibits a Keratinocyte Growth Factor (KGF) protein having the amino acid sequence of Figure 7 from stimulating epithelial cell mitogenesis, wherein said compound comprises an active ingredient that is selected from the group consisting of an antibody, a fragment of an antibody, and a DNA probe.

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126. (Amended) [An]A method of treating a patient having an epithelial skin condition caused by over-expression of Keratinocyte Growth Factor (KGF) comprising administering to said patient a therapeutically effective amount of a compound to treat said condition, wherein in an *in vitro* assay, said compound inhibits a Keratinocyte Growth Factor protein having the amino acid sequence of Figure 7 from stimulating epithelial cell mitogenesis, wherein said compound comprises an active ingredient that is selected from the group consisting of an antibody, a fragment of an antibody and a DNA probe.

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129. (Amended) A method of inhibiting a Keratinocyte Growth Factor from stimulating epithelial cells in an *in vitro* medium comprising applying a compound to said medium, wherein in an *in vitro* bioassay, said compound inhibits a Keratinocyte Growth Factor having the amino [aid] acid sequence [o f] of Figure 7 from stimulating epithelial cell mitogenesis wherein said compound comprises an active ingredient that is selected from the group consisting of an antibody, a fragment of an antibody and a DNA probe.

Please add the following new claims:

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--132. The method of claim 38, wherein said polypeptide stimulates a greater difference in fold stimulation of BALB/MK keratinocyte cells relative to NIH/3T3 fibroblasts when compared to the difference in fold stimulation of BALB/MK cells relative to NIH/3T3 cells stimulated by epidermal growth factor (EGF), transforming growth factor-alpha (TGF-alpha), acidic fibroblast growth factor (aFGF) and basic fibroblast growth factor (bFGF), as measured by percent of maximal H<sup>3</sup>-thymidine incorporation.

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133. The method of claim 38, wherein five nanomolar of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

134. The method of claim 49, wherein said polypeptide stimulates a greater difference in fold stimulation of BALB/MK keratinocyte cells relative to NIH/3T3 fibroblasts when compared to the difference in fold stimulation of

BALB/MK cells relative to NIH/3T3 cells stimulated by epidermal growth factor (EGF), transforming growth factor-alpha (TGF-alpha), acidic fibroblast growth factor (aFGF) and basic fibroblast growth factor (bFGF), as measured by percent of maximal H<sup>3</sup>-thymidine incorporation.

135. The method of claim 49, wherein five nanomolar of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

136. The method of claim 57, wherein said polypeptide stimulates a greater difference in fold stimulation of BALB/MK keratinocyte cells relative to NIH/3T3 fibroblasts when compared to the difference in fold stimulation of BALB/MK cells relative to NIH/3T3 cells stimulated by epidermal growth factor (EGF), transforming growth factor-alpha (TGF-alpha), acidic fibroblast growth factor (aFGF) and basic fibroblast growth factor (bFGF), as measured by percent of maximal H<sup>3</sup>-thymidine incorporation.

137. The method of claim 57, wherein five nanomolar of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

138. The method of claim 82, wherein said polypeptide stimulates a greater difference in fold stimulation of BALB/MK keratinocyte cells relative to NIH/3T3 fibroblasts when compared to the difference in fold stimulation of BALB/MK cells relative to NIH/3T3 cells stimulated by epidermal growth factor (EGF), transforming growth factor-alpha (TGF-alpha), acidic fibroblast growth factor (aFGF) and basic fibroblast growth factor (bFGF), as measured by percent of maximal H<sup>3</sup>-thymidine incorporation.



139. The method of claim ~~82~~, wherein five nanomolar of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

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140. The method of claim 114, wherein said polypeptide stimulates a greater difference in fold stimulation of BALB/MK keratinocyte cells relative to NIH/3T3 fibroblasts when compared to the difference in fold stimulation of BALB/MK cells relative to NIH/3T3 cells stimulated by epidermal growth factor (EGF), transforming growth factor-alpha (TGF-alpha), acidic fibroblast growth factor (aFGF) and basic fibroblast growth factor (bFGF), as measured by percent of maximal H<sup>3</sup>-thymidine incorporation.

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141. The method of claim 114, wherein five nanomolar of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.--

### REMARKS

Applicants thank Examiner Saoud for her explanation of the current status of the claims. However, applicants would appreciate confirmation that the amendment filed December 3, 1998 has been entered. Applicants understand that claims 38-131 are pending and under examination. Applicants also understand that recitations of methods of inhibiting by administration of heparin or a peptide are withdrawn from consideration. Applicants herewith cancel claims 122, 127 and 130, without prejudice or disclaimer and add new claims 132-141. Thus, with the entry of this